

WHAT IS CLAIMED IS:

1. A device for measuring the tension in stressed cables, said device comprising:

a frame having a pair of ends adapted to engage a said stressed cable;

5 Sub Cl 1 a jack mounted on said frame between its ends for applying a force on the stressed cable; and
a measuring means on said frame, for measuring the deflection of the stressed cable.

2. A device as defined in Claim 1 further comprising a hook means, said hook connected to said jack and adapted for engagement with said stressed cable.

3. A device as defined in Claim 2 wherein the force of said jack is applied to the stressed cable through said hook means.

4. A device as defined in Claim 1 wherein the jack is a hydraulic jack.

5. A device as defined in Claim 1 wherein the jack applies a pre-set force to the stressed cable.

6. A device as defined in Claim 1 wherein said measuring means includes a gauge mounted onto said frame.

7. A device as defined in Claim 1 wherein the frame is in the shape of a "V".

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8. A method of detecting the amount of tension in a stressed cable, said method including the following steps:
- supporting the stressed cable at a selected pair of spaced apart points;
- 5 applying a force to the stressed cable sufficient to deflect the cable relative to said supported points; and
- Sub Obj* measuring the deflection of the stressed cable.
9. A method as defined in Claim 7 wherein the force that is applied to the stressed cable is a known force.
10. A method as defined in Claim 7 wherein the amount of deflection is used to calculate the amount of stress in the stressed cable, by applying the following equation:
- $$T = \frac{F}{2\sin\theta} \text{ where } \theta = \tan^{-1} \frac{\Delta}{L/2}$$
- wherein the variable "L" refers to the distance between the spaced apart point, " Δ " refers to the deflection, and " θ " refers to the angle of deflection.
11. A device as defined in Claim 2 wherein the jack is a hydraulic jack.
12. A device as defined in Claim 2 wherein the jack applies a pre-set force to the stressed cable.
13. A device as defined in Claim 2 wherein said measuring means includes a gauge mounted onto said frame.

14. A device as defined in Claim 2 wherein the frame is in the shape of a "V".

15. A device as defined in Claim 3 wherein the jack is a ~~hydraulic~~ jack.

16. A device as defined in Claim 3 wherein the jack applies a pre-set force to the stressed cable.

17. A device as defined in Claim 3 wherein said measuring means includes a gauge mounted onto said frame.

18. A device as defined in Claim 3 wherein the frame is in the shape of a "V".